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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/558,840	12/16/2005	Alexander Zernickel	INA-17	8368

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EXAMINER
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BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

MAIL DATE	DELIVERY MODE
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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/558,840	<b>Applicant(s)</b> ZERNICKEL, ALEXANDER	
	<b>Examiner</b> Greg Binda	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/30/05</u> . | 6) <input checked="" type="checkbox"/> Other: <u>See Continuation Sheet</u> .          |

Continuation of Attachment(s) 6). Other: Annotated Drawing from US 4,634,296.

*Drawings*

1. The drawings are objected to because:
  - a. In Fig. 2 the reference numeral 1 is used to indicate one element and then reused to indicate another element.
  - b. The drawings fail to include the reference numeral 25 mentioned at page 10, lines 5+.
  - c. The pressed in portions described at page 10, lines 16+ are not indicated by reference numeral(s).
  - d. In Fig. 1 the lead line for reference numeral 28 fails to indicate a recess.
  - e. The drawings fail to show the limitations of claims 3, 8, 14 & 19.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

Art Unit: 3679

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

3. The disclosure is objected to as failing to comply with 37 CFR 1.77(c) for failing to include section headings.
4. The disclosure is objected to because the specification refers to specific claims. See for example page 1, line 27.
5. The abstract of the disclosure is objected to because it is too long and is written in the form of a claim. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The specification is objected to as failing to provide proper antecedent basis for the following claimed subject matter:

- a. Claim 3: "rotational angle"

- b. Claim 3: “critical rotational angle”
- c. Claim 18: all limitations therein

*Claim Objections*

- 7. The claims are objected to as failing to comply with 37 CFR 1.75(i) because elements of the claims are not separated by line indentation.
- 8. Claim 18 is objected to because the limitation, “deflection channel (5, 6)” should be changed to “deflection channel (9, 12)”.

*Claim Rejections - 35 USC § 112*

- 9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 10. Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
  - a. Claim 1, lines 27-29 recites the limitation, “the first circulatory channel (5) and the second circulatory channel (6) can be connected to one another”. No such connection is taught or contemplated in the specification where the first circulatory channel 5 and the

second circulatory channel 6 are disclosed as channels that remain distinct and unconnected.

b. Claim 19 recites the limitation, “the hollow body (13) can be deformed resiliently.”

The specification fails to teach how the hollow body is made so that it would deform resiliently. Normally one would expect the hollow body to be made from an elastomeric material in order to provide resilient deformation capability. However, the hollow body is neither described nor shown as being comprised of elastomeric material and it is unlikely that an elastomeric hollow body would be present in the claimed invention given its intended application, a steering column of a modern vehicle.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, line 25 recites the limitation, “the opposite direction” but does not recite a the direction that this “opposite direction” is the opposite of.

b. Claim 9 recites the limitation "the play" in line 2. There is insufficient antecedent basis for this limitation in the claim.

c. Claim 14 recites the limitation, “bears against a rest of the hollow body”. The meaning of the limitation is unknown.

d. Claim 19 recites the limitation, “the hollow body (13) can be deformed resiliently.” It is unclear how the hollow body is made so that it would deform resiliently. Normally one would expect the hollow body to be made from an elastomeric material in order to provide resilient deformation capability, but as noted in item 10b above, that does not appear to be the case in the instant invention. Instead, it appears that the hollow body 13 is made of an unspecified metal that, like most metals used to make hollow shafts, possesses some ability to deform resiliently.

*Claim Rejections - 35 USC § 102*

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe, US 4,634,296. Figs. 3-8 show a linear rolling bearing for transmitting torques about its longitudinal axis, having an inner profile element 2 and an outer profile element/hollow body 1 which surrounds the inner profile element at least partially, the two profile elements being mounted via rolling bodies 3 such that they can be displaced with respect to one another in the longitudinal direction, which rolling bodies circulate endlessly in at least one first circulatory channel (see attached annotated drawing) and in at least one second circulatory channel (see attached annotated drawing), the circulatory channel having a loadbearing channel 4b (see attached



annotated drawing) which is parallel to the longitudinal axis, a return channel 4c which is parallel to the longitudinal axis, and two deflection channels 4c which connect the loadbearing channel 4b and the return channel 4a to one another in an endless manner, the rolling bodies which are arranged in the loadbearing channel of the first circulatory channel being provided for transmitting a torque in the **clockwise direction** between the two profile elements, and the rolling bodies (3) which are arranged in the loadbearing channel of the second circulatory channel being provided to transmit a torque in the **counterclockwise direction** between the two profile elements.

Figs. 4 & 7 show the rolling bodies 3 are arranged with play in the return channels 4a and without play in the loadbearing channels 4b.

Watanabe's metal hollow body 1 is not disclosed as being made from any thing other than a typical metal is used for making a hollow shaft. Therefore it, like the instant hollow body 13, can be deformed resiliently (see item 12d above). Since the hollow body 1 in Watanabe can be deformed, the play at a return channel 4a can be reduced so that the return channel carries load.

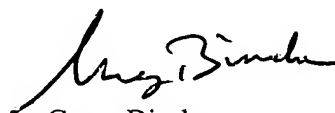
### *Conclusion*

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Geissler shows distinct first and second circulatory channels in Fig. 5; and connected first and second circulatory channels in Fig. 4.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 9:30 am to 7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Greg Binda  
Primary Examiner  
Art Unit 3679

FIG. 3

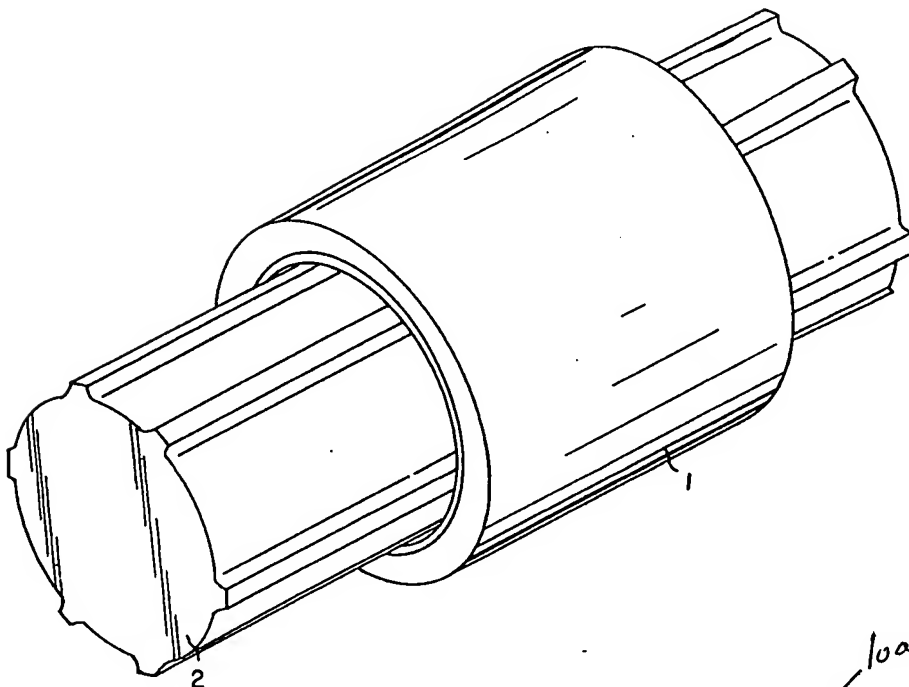


FIG. 4

